

<b>REISSUE APPLICATION DECLARATION BY THE INVENTOR</b>	Docket Number 0233C3
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As a below named inventor, I hereby declare that:

My residence, mailing address and citizenship are stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) or the subject matter which is described and claimed in patent number 5,990,389, granted November 23, 1999, and for which a reissue patent is sought on the invention entitled High Lysine Derivatives of  $\alpha$ -Hordothionin, the specification of which

is attached hereto.

was filed on \_\_\_\_\_ as reissue application number \_\_\_\_\_ and was amended on \_\_\_\_\_ (if applicable).

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply).

by reason of a defective specification or drawing.

by reason of the patentee claiming more or less than he had the right to claim in the patent.

by reason of other errors.

At least one error upon which reissue is based is described below. If the reissue is broadening reissue, such must be stated with an explanation as to the nature of the broadening:

Substitution of lysine for the wild-type amino acid at positions 10 and 12 in  $\alpha$ -hordothionin prevents proper protein folding in vivo, thus rendering Claims 1-3 inoperable.

(REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2)		Docket Number 0233C3
<p>All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant. As a named inventor, I hereby appoint the following attorney(s) and or agents(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.</p>		
Name(s)	Registration Number	
Catherine D. Brooke	44,041	
Marianne H. Michel	35,286	
Correspondence Address: Direct all communications about the application to:		
<input checked="" type="checkbox"/> Customer Number	27310	
Type Customer Number here		
<input type="checkbox"/> Firm or Individual Name		
Address		
Address		
City	State	Zip
Country		
Telephone	Fax	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.</p>		
Full name of sole or first inventor (given name, family name)		
A. Gururaj Rao		
Inventor's signature <i>A. Gururaj Rao</i>	Date Nov. 2, 2001	
Residence Polk County, Urbandale, IA 50322	Citizenship USA	
Mailing Address 4734 74 <sup>th</sup> Street, Urbandale, IA 50322		
Full name of second joint inventor (given name, family name)		
Larry R. Beach		
Inventor's signature <i>Larry R. Beach</i>	Date Nov. 2, 2001	
Residence Polk County, Des Moines, IA 50310	Citizenship USA	
Mailing Address 3939 Maquoketa Drive, Des Moines, IA 50311		
<input type="checkbox"/> Additional joint inventors on separately numbered sheets attached hereto.		

<b>REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT</b>		Docket Number 0233C3
This is part of the application for a reissue patent based on the original patent identified below:		
Name of Patentee(s) A. Gururaj Rao and Larry Beach		
Patent Number 5,990,389	Date Patent Issued November 23, 1999	
Title of Invention High Lysine Derivatives of $\alpha$ -Hordothionin		
<p>1. <input checked="" type="checkbox"/> Filed herein is a statement under 37 CFR 3.73(b). Form PTO/SB/96)</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent is in effect.</p>		
<p>One of the boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee".</p> <p>The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.</p>		
The assignee(s) owning an undivided interest in said original patent is/are Pioneer Hi-Bred International, Inc., and the assignee(s) consents to the accompanying application for reissue.		
Name of assignee/inventor (if not assigned)		
Signature <i>Marianne H. Michel</i>	Date <i>November 5, 2001</i>	
Typed or printed name and title of person signing for assignee (if assigned) Marianne H. Michel Senior Patent Counsel		

**STATEMENT UNDER 37 CFR 3.73(b)**Patent Owner: Pioneer Hi-Bred International, Inc.Patent No.: 5,990,389Issue Date: November 23, 1999Entitled: High Lysine Derivatives of  $\alpha$ -HordothioninPioneer Hi-Bred International, Inc., a corporation  
(Name of Assignee) (Type of Assignee - corporation, partnership, university, government agency, etc.)

states that it is:

1.  the assignee of the entire right, title, and interest; or
2.  an assignee of less than the entire right, title and interest.  
The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

In the patent application/patent identified above by virtue of either:

A.  An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 6564, Frame 089, or for which a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

 Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

November 5, 2001  
DateMarianne H. Michel

Typed or printed name

Marianne H. Michel  
SignatureSenior Patent Counsel

Title

RECORDED  
PATENT AND TRADEMARK  
OFFICE

JAN 17 1993

Serial No. 08/003,885  
Filed: January 13, 1993  
Case: 0233 US

ASSIGNMENT

For one Dollar (\$1) and other valuable consideration received, A. Gururaj Rao, of 4734 74th Street, Urbandale, Polk County, Iowa 50322, United States of America, and Larry Beach, of 3939 Maquoketa Drive, Des Moines, Polk County, Iowa 50131, United States of America, inventors and owners of an invention in "**HIGH LYSINE DERIVATIVES OF ALPHA-HORDOTHIONIN**" as disclosed in the application identified above, (the assignee being hereby authorized to insert the U.S. application number herein when it is ascertained) hereby sell, assign, and transfer to Pioneer Hi-Bred International, Inc., an Iowa corporation having a place of business at Des Moines, County of Polk, State of Iowa, United States of America, their entire right, title and interest, for the United States of America and its Territories and for any and all foreign countries, jurisdictions and regions, in and to the invention and to all letters patent or similar legal protection in the United States and its Territories and in any and all foreign countries and regions as are obtained for the invention by the identified application or any continuation, division, renewal, substitute or reissue thereof, or any legal equivalent thereof in any foreign country, jurisdiction or region, for their full terms and any extensions thereof, and including the right to claim priority.

We authorize and request the appropriate granting authorities, including the United States Commissioner of Patents and Trademarks, to issue any letters patent issuing on the invention to Pioneer Hi-Bred International, Inc.

This assignment is made under warranty that we have full power to make the same, that this assignment is not encumbered by any grant, license or other right previously given, and that we will do any further lawful act requested by this assignee or its successors in title in the prosecution of such application, and any and all other applications, United States or foreign, which may be filed on the invention by us or on our behalf, or in the enforcement of any patent rights issuing thereon.

Signed by us on the date or dates hereinafter set forth.

A. Gururaj Rao Jan 13 '93  
A. Gururaj Rao Date

Larry Beach Feb 8 '93  
Larry Beach Date

State of Iowa )  
County of Polk ) SS.

On Jan. 13 & Feb. 8, 1993 before me personally appeared A. Gururaj Rao and Larry Beach, to me known to be the persons named in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

Michael J. Roth  
Michael J. Roth, Notary Public  
My Commission expires October 11, 1993

ALL 6564 FRAME 089